



Proposed Title 179 NAC 22 Regulation Revisions

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- ▶ During this presentation, if you have any questions or comments, please e-mail them to doug.woodbeck@nebraska.gov

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- ▶ **179 NAC 22-003(5)** Provide or have available personnel, tools, spare parts, work areas, and chemicals necessary to accomplish continuous operation of the system **and providing for the safety of the water system personnel.**

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- ▶ 179 NAC 22-003(6) ... This **critical information emergency contact list (CIECL)** must contain a 24-hour phone number where a person can always be reached in the event of an emergency.

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- ▶ **179 NAC 22-003(6) continued**: It must be updated annually with a copy provided to the Department **no later than the last working day in February... An updated Emergency Plan must be submitted every three years, no later than the date of the previous plans approval.**

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179 NAC 22-003(7) Within 30 days of
notification of sanitary survey
deficiencies:

- ▶ a. **Notify the Department in writing** that the deficiencies have been corrected;
or

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- ▶ 179 NAC 22-003(7) continued
- ▶ b. **Develop and submit to the Department a corrective action plan that meets the requirements of the Department's notification of deficiencies letter.**

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- ▶ **179 NAC 22-003(8)(b)**. ... the public water system must install or require installation of properly located backflow preventers, ... where, in the opinion of the public water system, effective measures ... have not been taken to **contain the potential contamination within the premises being served by the system by the use of either the “containment” and/or “isolation” method(s) of cross-connection control ...**

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- ▶ 179 NAC 22-003(8)(b) continued:
- ▶ Dual check valves with intermediate atmospheric vents that have been approved by one of the agencies listed in 179 NAC 22-003 item 8.g. for use on beverage dispensing machines may be used for those specific applications, provided they are maintained and repaired as recommended by the manufacturer.

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- ▶ 179 NAC 22-003(8)(e) That, no less often than every five years, the public water system shall send a survey to **the owner/tenant of every active service connection to complete and return to the system**. The survey is an assessment of potential backflow hazards on the premises. ...

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- ▶ 179 NAC 22-003(8)(e) continued:
- ▶ Systems must obtain a 60% return of the surveys for residential services and 90% for non-residential services, during each five year survey cycle. ...

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- ▶ 179 NAC 22-003(8)(e) continued:
- ▶ On subsequent five year survey cycles, additional effort must be made to obtain a survey from service connections that have not submitted a survey back to the public water system. ...

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- ▶ 179 NAC 22-003(8)(e) continued ... **The public water system must be properly protected from any cross-connection identified through the survey process or any other means, as described in 179 NAC 22-003 items 8 through 8i(2).**

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- ▶ 179 NAC 22-003(8)(e) continued ... **If a system implements the containment method for backflow prevention, the system is not required to send surveys to owners/tenants of service connections which are properly protected by an appropriate backflow preventer located on the main service line(s) and where the backflow preventer is properly tested and/or maintained according to 179 NAC 22-003 items 8(d) and (i). ...**

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- ▶ 179 NAC 22-003(8)(e) continued ... **The service connections which are properly protected but not surveyed may be counted in the total number of surveys returned to the system for meeting the 60%/90% required return rate.**

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- ▶ 179 NAC 22-004(2)... **Where no maintenance recommendations or schedules are provided by the manufacturer of equipment, the maintenance recommendations and schedules deemed to be best operation and maintenance practices by the equipment supplier and/or the American Water Works Association must be incorporated in the operation and maintenance manual.**

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179 NAC 22-004(4) Maintaining a system of records in order to:

- ▶ a. Evaluate the system, and
- b. Annually review and update the system's short-term (2 year) and long-term (10 year) plans (which must be kept 10 years).

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- ▶ 179 NAC 22-004(5) Take all available action as necessary, **within the system's legal capability**, to protect the system and its components from encroachments ...

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- ▶ 179 NAC 22-004(6) Have **on-site** the equipment necessary to apply emergency disinfection ...

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- ▶ 179 NAC 22-004(7) If the system disinfects, have available equipment for accurate measurement of disinfectant residual **that provides numeric results that do not require interpretation.**

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- ▶ **179 NAC 22-004(7) continued**
- ▶ **The testing equipment must be standardized at least once annually or as often as recommended by the manufacturer ...**

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- ▶ 179 NAC 22-005(11) Have **on-site, or have a written signed agreement for**, an auxiliary power source to provide a supply of safe drinking water for emergency use

...

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- ▶ 179 NAC 22-006(3) **When system pressure drops to less than 20 psi, but is still positive, the system must do one of the following** (all samples submitted pursuant to this section must be sent to the Department Laboratory or a laboratory that has entered into an agreement with the Department pursuant to 179 NAC 3-009):

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- ▶ 179 NAC 22-006(3) continued:
- ▶ **A. Immediately initiate a disinfection process utilizing procedures substantial enough to produce and maintain a minimum free chlorine residual of 0.20 mg/L or a total chlorine residual of 0.50 mg/L in the distribution system at the maximum residence time location(s) for at least 48 consecutive hours.**

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- ▶ 179 NAC 22-006(3)(A) continued:
- ▶ Following completion of the disinfection process and return of water quality to that found during normal operations, a PWS must collect one sample from each affected coliform sampling zone within seven calendar days from the date of the pressure drop. All samples must show the absence of coliform organisms or the PWS must again apply disinfection and resample as described herein until a sample shows the absence of coliform organisms, or ...

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- ▶ 179 NAC 22-006(3) continued ...
- ▶ **B. Collect a minimum of two samples from each affected coliform sampling zone. The samples must be collected at least 24 hours apart. All samples must be collected and submitted for analysis within five working days of the recorded reduced system pressure. If any samples collected pursuant to the requirements of this paragraph show the presence of coliform organisms, disinfection procedures must be accomplished in accordance with item A above.**

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- ▶ 179 NAC 22-006(4) When system pressure is completely lost, **the system must do one of the following** (all samples submitted pursuant to this section must be sent to the Department Laboratory or a laboratory that has entered into an agreement with the Department pursuant to 179 NAC 3-009):

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- ▶ 179 NAC 22-006(4) continued: **A. Immediately initiate a disinfection process utilizing procedures substantial enough to produce and maintain a minimum free chlorine residual of 0.20 mg/L or a total chlorine residual of 0.50 mg/L in the distribution system at the maximum residence time location(s) for at least 48 consecutive hours. ...**

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- ▶ 179 NAC 22-006(4)(A) continued: Following completion of the disinfection process and return of water quality to that found during normal operations, a PWS must collect and submit one set of five samples from each affected coliform sampling zone within seven calendar days from the date of pressure loss. All samples must show the absence of coliform organisms or the PWS must again apply disinfection and resample as described herein until all five samples from each set of samples show the absence of coliform organisms, or

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- ▶ 179 NAC 22-006(4) continued ...
- ▶ **B. Collect a minimum of two sets of five samples from each affected coliform sampling zone. Each set must be collected at least 24 hours apart. All samples must be collected within five working days of the recorded complete loss in system pressure and submitted for analysis. If any samples collected pursuant to the requirements of this paragraph show the presence of coliform organisms, disinfection procedures must be accomplished in accordance with item A above.**

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- ▶ 179 NAC 22-007(1) **Perform an internal inspection**, and clean if necessary, water storage facilities equipped for accessibility (those that have minimum oval openings of 24" x 18", round openings of 24" diameter, square openings of 20" per side, or rectangular openings of 24" x 18") no less than once every five years.

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- ▶ 179 NAC 22-007(1) continued:
Storage facilities equipped with a smaller inspection opening must be inspected by visual observation from the opening of the facility.

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- ▶ 179 NAC 22-008(1) Maintain and record accurate measurement of chemical use no less often than five days per week. **Accurate measurement must demonstrate that the chemical is being applied within +/- 10% of the Department approved design application rate. ...**

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179 NAC 22-008(1)(a) continued:

a. A system need not measure and record the amount (pounds/gallons) of chlorine added if the system uses chlorine as a disinfectant and measures and records the disinfectant residual at least five days per week

- ▶ **(1) At or near the point(s) of entry to the distribution system, and**
- ▶ **(2) At or near the point of maximum residence time in the distribution system.**

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- ▶ **179 NAC 22-008(1)(b)**
- ▶ **b. Likewise, if a system adds fluoride and measures and records the fluoride content of the water at or near each point of application or common point of entry at least five days per week, the system need not measure the amount (pounds/gallons) of fluoride added.**

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- ▶ 179 NAC 22-008(2) If sampling is to be used in lieu of measuring the amount (pounds/gallons) of chlorine or fluoride added, a sampling plan must be submitted for review and approval by the Department.

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- ▶ 179 NAC 22-008(4) Store chemicals in accordance with manufacturer's recommendations for chemical compatibility, and properly dispose of any stored chemicals that have exceeded their expiration date or have degraded to a point of ineffectiveness (for example, sodium hypochlorite or calcium hypochlorite).

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- ▶ 179 NAC 22-008(7) If disinfecting or fluoridating, provide approved methodology equipment for accurate measurement of chemical content that provides numeric results that do not require human interpretation. The testing equipment must be standardized at least once annually or as often as recommended by the manufacturer of the equipment.

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- ▶ 179 NAC 22-008(8) When treating to remove or inactivate regulated contaminants, provide proper test equipment to determine process control changes. **For contaminants that are not regulated (i.e., iron, manganese, hardness, etc.), perform process control tests at least weekly.**

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